

Friday, 9/21/2007 1:00:05 PM
Kim Johnston

Process Sheet

41

Customer	: CU-DAR001 Dart Helicopters Services	Drawing Name	: GHW ASSEMBLY
Job Number	: 34786		
Estimate Number	: 12128		
P.O. Number	: N/A	Part Number	: D412729011
This Issue	: 9/21/2007 S.O. No. : N/A	Drawing Number	: DSK 092 REV B
Prsht Rev.	: NC	Project Number	: N/A
First Issue	: N/A Type : MACHINED PARTS	Drawing Revision	: A
Previous Run	: 34128	Material	: N/A
Written By	:	Due Date	: 10/12/2007
Checked & Approved By	: <u>07.09.24</u>	Qty:	1 Um: Each
Comment	: Est Rev: A 05.01.12 New Issue KJ/JLM		

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	DC	DOCUMENT CONTROL
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KS 07.09.26 ①

Comment: DOCUMENT CONTROL

Photocopy bluefile and create labels per PPP D412-729-011 CHG003

07/10/30

2.0	34786A	GHW MEDIUM BELL
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Comment: Sub-Component GHW MEDIUM BELL

D412-729-041 B 34786A

30

3.0	PACKAGING 1	PACKAGING RESOURCE #1
-----	-------------	-----------------------



Comment: PACKAGING RESOURCE #1

Pick Packing Kit

4.0	QC4	INSPECT 100% KITS FOR COMPLETENESS
-----	-----	------------------------------------



Comment: INSPECT 100% KITS FOR COMPLETENESS

07/10/30

5.0	PACKAGING 1	PACKAGING RESOURCE #1
-----	-------------	-----------------------



Comment: PACKAGING RESOURCE #1

Identify and pack for shipping as per PPP D412-729-011

Location:

PPP Rev:

0 7/10/30 50 62

6.0	QC21	FINAL INSPECTION/W/O RELEASE
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Comment: FINAL INSPECTION/W/O RELEASE

07/10/30 ①

Job Completion



07.10.30

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: D Date: 27/10/30
 QA: N/C Closed: _____ Date: _____

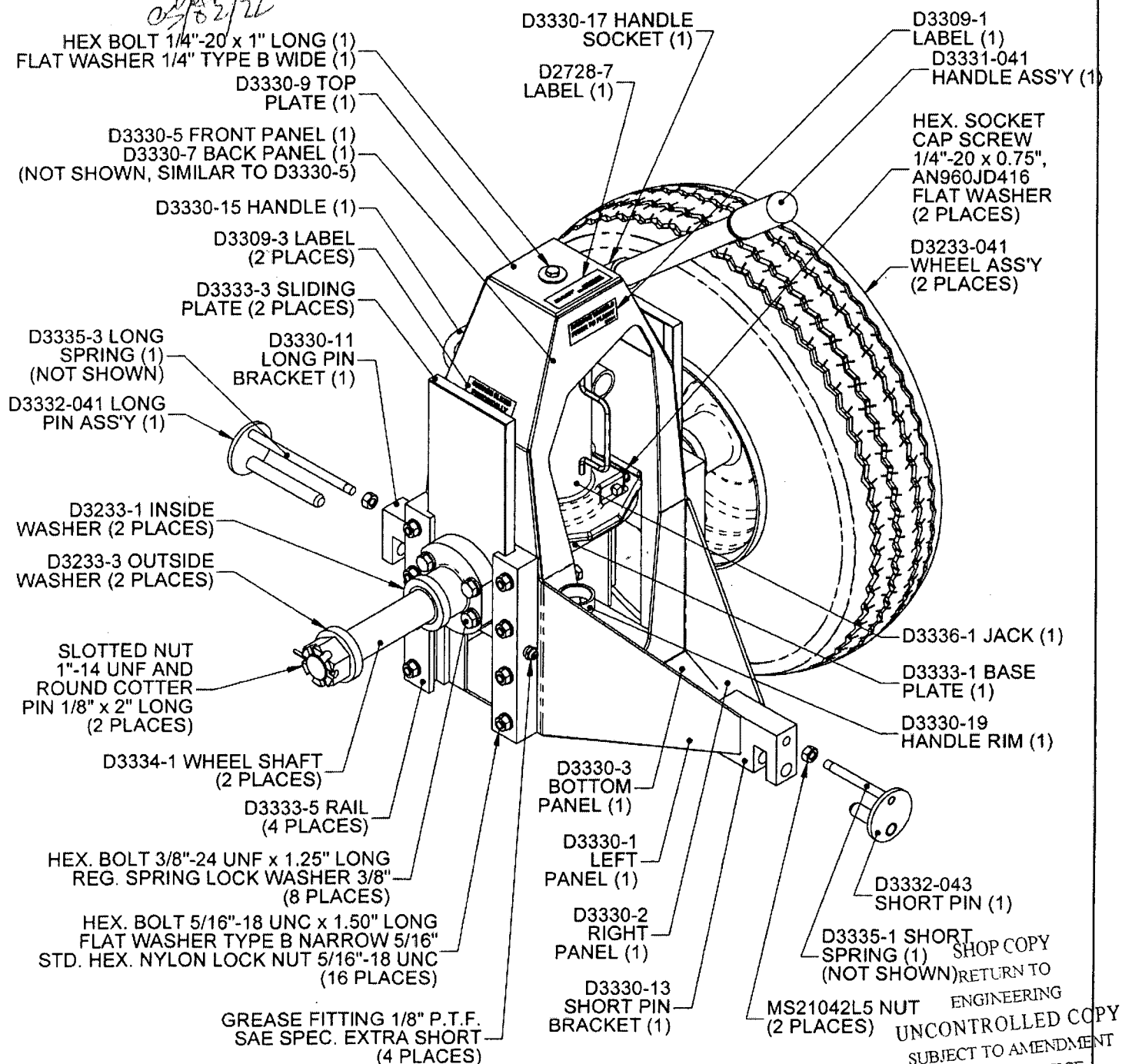
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED	APPROVED	DRAWING NO. DSK 092	REV. B SHEET 1 OF 1
DATE	05.02.18	TITLE HYD. GROUND HANDLING	SCALE 1:5
A	04.12.06	NEW ISSUE	
B	05.02.18	REDESIGN TO FIT NEW WHEEL ASS'Y	

RELEASED



NOTE:

- 1) APPLY RUST INHIBITOR ON ALL PARTS AND AREAS NOT PROTECTED BY PAINT OR GREASE.
RUST INHIBITOR POSSIBLE SUPPLIER: ACKLANDS-GRANGER INC., P/N LPSC30316.

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 34786

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Date: Friday, 9/21/2007 1:00:56 PM
 User: Kim Johnston

Process Sheet

41

Customer : CU-DAR001 Dart Helicopters Services Drawing Name : GHW MEDIUM BELL
 Job Number : 34786A
 Estimate Number : 12129
 P.O. Number : *NIA* Part Number : D412729041
 This Issue : 9/21/2007 S.O. No. : *NIA* Drawing Number : DSK 092 REV B
 Prsht Rev. : NC Project Number : N/A
 First Issue : *NIA* Type : MACHINED PARTS Drawing Revision : B
 Previous Run : 34128A Material : *NIA*
 Due Date : 10/12/2007 Qty: 2 Um: Each
 Written By : *[Signature]*
 Checked & Approved By : *[Signature]*
 Comment : Est Rev E 05.04.13 LPS3 rust inhibitor added; Hardware P/N's changed KJ/JLM

Additional Product

Job Number:



Seq. #: Machine Or Operation: Description :

1.0 DC DOCUMENT CONTROL



Comment: DOCUMENT CONTROL

If D412-729-041 is a W/O on it's own,
 Photocopy bluefile and create labels per PPP D412-729-041 CHG003

NIA [Signature]

2.0 D27287 Decal



Comment: Qty.: 1.0000 Each(s)/Unit Total : 2.0000 Each(s)

Pick:

Qty Part Number Description Batch
 ✓ 1 D2728-7 Label *322554*

Ppl 07.10.30

3.0 D3233041 Wheel Assembly



Comment: Qty.: 2.0000 Each(s)/Unit Total : 4.0000 Each(s)

Pick:

Qty Part Number Description Batch
 ✓ 2 D3233-041 Wheel Assembly *328609*

Ppl 07.10.30

4.0 D32331 Inside Washer



Comment: Qty.: 2.0000 Each(s)/Unit Total : 4.0000 Each(s)

Pick:

Qty Part Number Description Batch
 ✓ 2 D3233-1 Inside Washer *334175*

Ppl 07.10.30

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: GHW MEDIUM BELL

Job Number: 34786A

Part Number: D412729041

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

D32333

Outside Washer



Comment: Qty.: 2.0000 Each(s)/Unit Total : 4.0000 Each(s)

Pick:

Qty Part Number Description Batch

2 D3233-3 Outside Washer

B34176

Pl 07.10.30

6.0

D33091

Label



Comment: Qty.: 1.0000 Each(s)/Unit Total : 2.0000 Each(s)

Pick:

Qty Part Number Description Batch

1 D3309-1 Label

B23767

Pl 07.10.30

7.0

D33093

Label



Comment: Qty.: 2.0000 Each(s)/Unit Total : 4.0000 Each(s)

Pick:

Qty Part Number Description Batch

2 D3309-3 Label

B23768

Pl 07.10.30

8.0

D3330041

Frame Weldment



Comment: Qty.: 1.0000 Each(s)/Unit Total : 2.0000 Each(s)

Pick:

Qty Part Number Description Batch

1 D3330-041 Frame Weldment

B34177

Pl 07.10.30

9.0

D3331041

Handle Assembly



Comment: Qty.: 1.0000 Each(s)/Unit Total : 2.0000 Each(s)

Pick:

Qty Part Number Description Batch

1 D3331-041 Handle Assembly

B23769

Pl 07.10.30

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

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Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: GHW MEDIUM BELL

Job Number: 34786A

Part Number: D412729041

Job Number:



Seq. #:

Machine Or Operation:

Description :

10.0

D3332041

Pin Assembly



Comment: Qty.: 1.0000 Each(s)/Unit Total : 2.0000 Each(s)

Pick:

✓ Qty Part Number Description Batch

1 D3332-041 Long Pin Assembly B23770

Cpl 07-10-30

11.0

D3332043

Pin Assembly



Comment: Qty.: 1.0000 Each(s)/Unit Total : 2.0000 Each(s)

Pick:

✓ Qty Part Number Description Batch

1 D3332-043 Short Pin Assembly B23771

Cpl 07-10-30

12.0

D33331

Base Plate Panel



Comment: Qty.: 1.0000 Each(s)/Unit Total : 2.0000 Each(s)

Pick:

✓ Qty Part Number Description Batch

1 D3333-1 Base Plate B31522

Cpl 07-10-30

13.0

D33333

Sliding Plate



Comment: Qty.: 2.0000 Each(s)/Unit Total : 4.0000 Each(s)

Pick:

✓ Qty Part Number Description Batch

1 D3333-3 Sliding Plate B31520

Cpl 07-10-30

14.0

D33335

Rail



Comment: Qty.: 4.0000 Each(s)/Unit Total : 8.0000 Each(s)

Pick:

Qty Part Number Description Batch

4 D3333-5 Rail B30952*

Cpl 07-10-30

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: GHW MEDIUM BELL

Job Number: 34786A

Part Number: D412729041

Job Number:



Seq. #:

Machine Or Operation:

Description :

15.0

D33341

Wheel Shaft



Comment: Qty.: 2.0000 Each(s)/Unit Total : 4.0000 Each(s)

Pick:

Qty Part Number Description Batch

2 D3334-1 Wheel Shaft

B30953 → 2 *

B34795 → 2 ✓

Ppl 07.10.30

*

16.0

D33351

Short Spring



Comment: Qty.: 1.0000 Each(s)/Unit Total : 2.0000 Each(s)

Pick:

Qty Part Number Description Batch

1 D3335-1 Short Spring

B22256 *

Ppl 07.10.30

17.0

D33353

Long Spring



Comment: Qty.: 1.0000 Each(s)/Unit Total : 2.0000 Each(s)

Pick:

Qty Part Number Description Batch

1 D3335-3 Long Spring

B34573 ✓

Ppl 07.10.30

18.0

D33361

Jack



Comment: Qty.: 1.0000 Each(s)/Unit Total : 2.0000 Each(s)

Pick:

Qty Part Number Description Batch

1 D3336-1 Jack

B30954 ✓

Ppl 07.10.30

19.0

AN960JD416

Washer



Comment: Qty.: 2.0000 Each(s)/Unit Total : 4.0000 Each(s)

Pick:

Qty Part Number Description Batch

2 AN960JD416 Washer

M105426 ✓

Ppl 07.10.30

20.0

CP21

1/8" Cotter Pin 2" long



Comment: Qty.: 2.0000 Each(s)/Unit Total : 4.0000 Each(s)

Pick:

Qty Part Number

Description Batch

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

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Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: GHW MEDIUM BELL

Job Number: 34786A

Part Number: D412729041

Job Number:



Seq. #:

Machine Or Operation:

Description:

2 CP-21 1/8" Cotter Pin 2" long, Span

M16626 ✓

Ppl 07-10-30

21.0

HC12

1/4-20 UNC x 1" Hex Bolt



Comment: Qty.: 1.0000 Each(s)/Unit Total: 2.0000 Each(s)

Pick:

Qty Part Number Description Batch

1 HC-12 1/4"-20 UNC x 1" long Hex Bolt, Span

M16529 ✓

Ppl 07-10-30

22.0

HC29

5/16-18 UNCx1.5 Hex Bolt



Comment: Qty.: 16.0000 Each(s)/Unit Total: 32.0000 Each(s)

Pick:

Qty Part Number Description Batch

16 HC-29 5/16"-18 UNC x 1.5" long Hex Bolt, Prof

M103717 → 3 * +1
M105856 → 29 ✓

Ppl 07-10-30

23.0

HC153

3/8"-24UNFx1.25 Hex Bolt



Comment: Qty.: 8.0000 Each(s)/Unit Total: 16.0000 Each(s)

Pick:

Qty Part Number Description Batch

8 HC-1533/8"-24 UNF x 1.25" long Hex Bolt, Span

M103717 ✓

Ppl 07-10-30

24.0

HN120

HEX SLOTTED NUT



Comment: Qty.: 2.0000 Each(s)/Unit Total: 4.0000 Each(s)

Pick:

Qty Part Number Description Batch

2 HN-1201" Slotted Nut, Prof

M102150 *

Ppl 07-10-30

25.0

HN177

5/16-18UNC Nylon LockNut



Comment: Qty.: 16.0000 Each(s)/Unit Total: 32.0000 Each(s)

Pick:

Qty Part Number Description Batch

16 HN-1775/16"-18 UNC Nylon Lock Nut, Span

M103717 ✓

Ppl 07-10-30

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: GHW MEDIUM BELL

Job Number: 34786A

Part Number: D412729041

Job Number:



Seq. #:

Machine Or Operation:

Description :

26.0

HX15

1/4-20 UNCx3/4 S.H.C.S.



Comment: Qty.: 2.0000 Each(s)/Unit Total : 4.0000 Each(s)

Pick:

Qty Part Number Description Batch

2 HX-15 1/4"-20 UNC x 3/4" long S.H.C.S., Span M16626 ✓

Pd 07-10-30

27.0

MS21042L5

Nut



Comment: Qty.: 2.0000 Each(s)/Unit Total : 4.0000 Each(s)

Pick:

Qty Part Number Description Batch

2 MS21042L5 Nut (or -5) M104812 ✓

Pd 07-10-30

28.0

2333

1 1/4" Type B Washer



Comment: Qty.: 1.0000 Each(s)/Unit Total : 2.0000 Each(s)

Pick:

Qty Part Number Description Batch

1 2333 1 1/4" Type B Flat Washer (Wide), Span M102150 ✓

Pd 07-10-30

29.0

18SNB

3/8" Lock Washer



Comment: Qty.: 8.0000 Each(s)/Unit Total : 16.0000 Each(s)

Pick:

Qty Part Number Description Batch

8 18-SNB 3/8" Lock Washer, Span M103717 ✓

Pd 07-10-30

30.0

113803

1/8" PTF Grease Fitting



Comment: Qty.: 4.0000 Each(s)/Unit Total : 8.0000 Each(s)

Pick:

Qty Part Number Description Batch

2 113-803 1/8" PTF Grease Fitting, Span M102771 ✓

Pd 07-10-30

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: D Date: 07/14/30
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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Drawing Name: GHW MEDIUM BELL

Job Number: 34786A

Part Number: D412729041

Job Number:



Seq. #:

Machine Or Operation:

Description:

31.0

516WC

SS Flat Washer 5/16



Comment: Qty.: 16.0000 Each(s)/Unit Total: 32.0000 Each(s)

Pick:

Qty Part Number Description Batch

16 5/16"WC Type B Flat Washer (Narrow), Prof

M105403 → 27 ✓
M106059 → 5

Ppl 07.10.30

*

32.0

LARGE FAB 1

LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

Assemble as per Dwg DSK 092. Apply LPS3 heavy duty rust inhibitor & corrosion (Procyon). Inflate wheel assembly to 90 psi. Ensure that unit goes up and down smoothly after assembly. Install decals last.

Ppl 07.10.30

33.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

So 07.10.30 (X2)

34.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: _____

24786

35.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

(2)
D 07.10.30

Job Completion



u 07.10.30

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

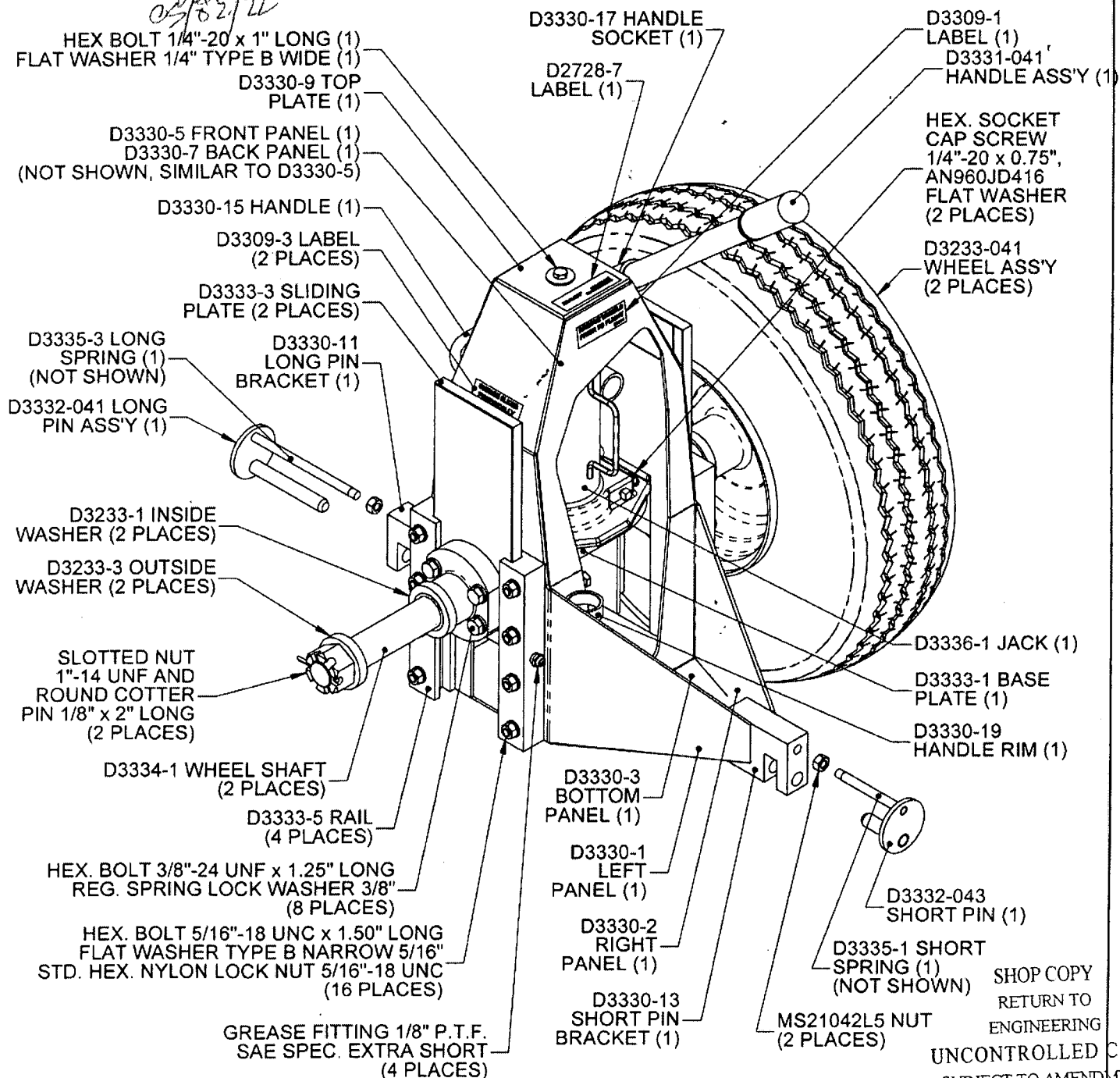
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NOTE: Date & initial all entries

DART

DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED RF	APPROVED	DRAWING NO. DSK 092	REV. B SHEET 1 OF 1
DATE 05.02.18		TITLE HYD. GROUND HANDLING	SCALE 1:5
A	04.12.06	NEW ISSUE	
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RELEASED
05/02/22**NOTE:**

- 1) APPLY RUST INHIBITOR ON ALL PARTS AND AREAS NOT PROTECTED BY PAINT OR GREASE.
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